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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,569	12/09/2003	Philip A. Zarnoch	26333.905	5080

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DAVID B. SMITH  
MICHAEL BEST & FRIEDRICH LLP  
100 EAST WISCONSIN AVENUE  
SUITE 300  
MILWAUKEE, WI 53202-4108

EXAMINER

TRIEU, THERESA

ART UNIT PAPER NUMBER

3748

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/731,569

Applicant(s)

ZARNOCH ET AL.

Examiner

Theresa Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/9/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>April 26, 2004</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “passage formed in the housing for receiving the discharge fluid from port” recited in claims 2, 14 and 28, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: “a radially extending drain connection (42)” (see page 3, line 1). Corrected drawing sheets in compliance with 37

CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1-9, 11, 12-21 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of Goodyear (Patent Number 2,716,861) or Mosbacher (Patent Number 2,745,355).***

Regarding claims 1-8, 11 and 12, Goodyear (as shown in Fig. 1-17) or Mosbacher (as shown in Figs. 1-5) discloses a compressor comprising a housing (21 in Mosbacher) having a bore (29 in Goodyear; 15 in Mosbacher), a liner (29 in Goodyear; 15 in Mosbacher) disposed on the inner wall of the housing defining the bore and having at least one slot (not numbered; however, clearly seen in Fig. 2 in Mosbacher) and at least one discharge port (not numbered; however, clearly seen in Fig. 3 in Goodyear; in 38, 39 Mosbacher), a first rotor (11 in Goodyear; 15 in Mosbacher) mounted for rotation in the housing with its outer surface in a closely spaced relation to the inner wall of the liner, and at least one second rotor (17 in Goodyear; 10, 11 in

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Mosbacher) extending through the slot (not numbered; however, clearly seen in Fig. 3 in Goodyear and Fig. 2 in Mosbacher) in the liner and intermeshing with the first rotor to compress fluid introduced between the rotors before it is discharged through the port; a passage (not numbered; however, clearly seen in Fig. 3 in Goodyear; 38, 39 in Mosbacher) being formed in the housing for receiving the discharged fluid from the port and passing it from the housing; the axis of the second rotor extending transverse to the axis of the first rotor (see Fig. 3 in Goodyear); there are two second rotors (17 in Goodyear; 10, 11 in Mosbacher) being disposed adjacent the respective sides of the first rotor; there are two diametrically opposed slots (not numbered; however, clearly seen in Fig. 3 in Goodyear and Fig. 2 in Mosbacher) and two diametrically opposed ports (not numbered; however, clearly seen in Fig. 3 in Goodyear; 38, 39 in Mosbacher) formed through the liner (29 in Goodyear; 15 in Mosbacher); lobes (25 in Goodyear) being formed on the first rotor and define screw grooves (not numbered; however, clearly seen in Fig. 1 in Goodyear) for receiving the fluid; lobes (not numbered; however, clearly seen in Fig. 2 in Mosbacher) are formed on the second rotor so that, as the first rotor rotates, the latter lobes entering the screw grooves to trap and compress the fluid; as the first rotor rotates, the trapped fluid being compressed as the length and the volume of each screw groove reduced; upon further rotation of the first rotor, each groove passing the discharge port (38, 39 in Mosbacher) thus delivering the compressed fluid to the drain passage (37 in Mosbacher); the compressor being a screw compressor, the first rotor is a main rotor (11 in Goodyear), and the second rotor is a gate rotor (17 in Goodyear); the fluid being air.

The method claims 13-20 are inherent in the operation of the any one of Goodyear or Mosbacher device.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Regarding claims 10 and 22-32, Goodyear or Mosbacher a compressor having a first rotor (11 in Goodyear; 15 in Mosbacher) rotating in a housing and in engagement with a second rotor (17 in Goodyear; 10, 11 in Mosbacher) so as to compress fluid introduced between the rotors, a liner (29 in Goodyear; 15 in Mosbacher) between the first rotor and the housing, providing a discharge port (not numbered; however, clearly seen in Fig. 3 in Goodyear; 38, 39 in Mosbacher) in the liner to receive the compressed fluid; at least one slot (in Goodyear; in Mosbacher) in the liner for receiving at least a portion of the second rotor (in Goodyear; in Mosbacher), the portion of the second rotor intermeshing with the first rotor; two diametrically opposed slots (not numbered; however, clearly seen in Fig. 3 in Goodyear and Fig. 2 in

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Mosbacher) and two diametrically opposed ports (not numbered; however, clearly seen in Fig. 3 in Goodyear and 38, 39 in Mosbacher) being provided through the liner; a passage (in Goodyear; in Mosbacher) in the housing for receiving the discharged fluid from the port and passing it from the housing; lobes (25 in Goodyear) on the first rotor that define screw grooves for receiving the fluid; lobes (not numbered; however, clearly seen in Fig. 2 in Mosbacher) on the second rotor so that, as the first rotor rotates, the latter lobes entering the screw grooves to trap and compress the fluid; as the first rotor rotates, the trapped fluid being compressed as the length and the volume of each screw groove being reduced; each groove passing the discharge port (38, 39 in Mosbacher) thus delivering the compressed fluid to the drain passage (37 in Mosbacher). However, Goodyear or Mosbacher fails to disclose replacing the liner with another liner having a discharge port that varies in location and/or size from the port of the first-mentioned liner.

It is examiner's position that one having ordinary skill in the compressor art, would have found it obvious to replace the liner with another liner as claim having different characteristics, since it is merely design parameters, depending on being used for a particular purposes or solving a stated problem. Moreover, there is nothing in the record which establishes that the claimed replacing the liner with another liner having different characteristics, presents a novel of unexpected result (See *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)).

#### ***Prior Art***

The IDS (PTO-1449) filed on April 26, 2004 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of five patents: Zimmern (U.S. Patent Number 3,133,695), Sato (U.S.

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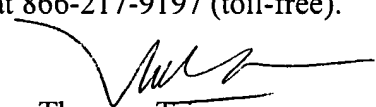
Patent Number 4,036,567), Mosbacher et al. (U.S. Patent Number 4,227,867), Winyard (U.S. Patent Number 4,824,348), and Yoneda (Publication Number JP 05-113183), each further discloses a state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT  
December 6, 2005



Theresa Trieu  
Primary Examiner  
Art Unit 3748